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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,135	01/20/2004	Frank J. Cosenza	370081-00003	4133

8840 7590 04/26/2007

INTELLECTUAL PROPERTY  
ALCOA TECHNICAL CENTER, BUILDING C  
100 TECHNICAL DRIVE  
ALCOA CENTER, PA 15069-0001

EXAMINER
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ALI, MOHAMED HATEM

ART UNIT	PAPER NUMBER
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3609

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/762,135

**Applicant(s)**

COSENZA ET AL.

**Examiner**

Mohamed H. Ali

**Art Unit**

3609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/10/2004</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections.***

1. Claims 1, 2, 6 and 8 are objected to because of the following informalities:

In claim 6, at line 2, the term - - the - - is missing before the phrase "first piece".

Claims 1, 2, and 8 are objected to because of the characters H1, H3, and 0 are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 1, 3, 4, 10, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3609

In claim 1, "the head of a fastener" lacks proper antecedent basis.

In claims 3, 4, 10, and 11 the recitation "the preselected included angle,  $\theta$ " renders the claims indefinite since it is unclear as to which  $\theta$  of parent claims 1 and 8 Applicant is referring to.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US 6,264,412 B1) in view of Smith (3,252,493).

As per claim 1, Nakamura et al teaches a spacer (bushing 13) to be secured to a panel (Honeycomb panel 11) of a predetermined thickness with a bore (through-hole 12) comprising:

a first piece (first cylindrical member 14) having a generally tubular body portion of a preselected height, (H1) with a first end and a second end (as illustrated in Fig. 3), the second end having a preselected included angle,  $\theta$  (see bottom 14a with angle) with respect to an axis (unmarked vertical dotted axis, see Fig.1) that passes through a bore of the first piece (14);

Art Unit: 3609

a second piece (second cylindrical member 15) having a first end, an annular ridge (upper part of 15a) which is located adjacent to the first end and a flange (flange 19) which is located adjacent to the annular ridge (15a), the first end having a preselected height (H3), a preselected included angle,  $\theta$  (15a with angle) with respect to the axis and a seat (15a) which is adapted to receive the head of a fastener (fastener head 21).

However, Nakamura et al fails to explicitly teach the second end of the first piece is sandwiched between the first end of the second piece and the annular ridge.

Smith in the same field of invention discloses the concept of having two spaced sheets including a second end (22) of a first piece (20) that is sandwiched between a first end (18) of a second piece (15) and an annular ridge (17).

From this teaching of Smith, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the panel fixing device of Nakamura to include the process of sandwiching the second end of the first piece between the first end of the second piece as taught by Smith in order to provide a sandwich type panel structure that can be installed with a minimum of panel preparation and with the simplest of tools.

As per claim 2, Nakamura et al discloses that the preselected height (H3 has a height from about 20% to about 40% of the height H1 (as illustrated in Fig. 2).

As per claim 3, Nakamura et al discloses the preselected included angle,  $\theta$  has a value from about 80 degrees to about 130 degrees and a value of about 180 degrees (14a and 15a with angles).

Art Unit: 3609

As per claim 5, Nakamura et al discloses that the flange is secured to the panel (11) with an effective amount of an adhesive (adhesive 20).

As per claim 6, Nakamura et al discloses that the first end of the first piece (14) is secured to the panel by curling the first end of first piece in to the panel (via engaging flange section 17).

As per claim 7, Nakamura et al discloses the flange has a preselected shape a circle (via flange 19).

Claim 8 is rejected for similar rational of claims 1 and 2 above.

Claims 9 – 13 are rejected for similar rational of claims 3 – 7 above.

As per claims 1 and 8, Applicant is reminded that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hazelman (6,077,009) discloses Blind fattener with high strength blind and high clamp and High shear load resistance.

Worthing (4,817,264) discloses the axially collapsible fastener.

Art Unit: 3609

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed H. Ali whose telephone number is 571-270-3021. The examiner can normally be reached on 7-30 to 5.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on 571-270-3033. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mohamed H Ali  
Examiner  
Art Unit 3609

MA

  
LYNDA JASMIN  
SUPERVISORY PATENT EXAMINER